

the whole of the nucleotide sequence of SEQ ID NO:4 or its complementary nucleotide sequence.

3. (Twice Amended) An isolated DNA which encodes a desert hedgehog protein of human origin, and which contains the whole of the nucleotide sequence of SEQ ID NO:5 or its complementary nucleotide sequence.

4. (Twice Amended) An isolated DNA which encodes a desert hedgehog protein of human origin, and which contains the whole of the nucleotide sequence of SEQ ID NO:6 or its complementary nucleotide sequence.

5. (Twice Amended) The DNA of claim 2, wherein, based on the degeneracy of genetic codes, one or more nucleotides are replaced with different nucleotides while conserving the encoding amino acid sequence.

17. (Amended) An isolated DNA which encodes a desert hedgehog protein of human origin, which has a DNA identity of at least 80% homology to either of DNAs of mouse desert hedgehog, mouse and human Indian hedgehog, and mouse, chicken, human and zebrafish sonic hedgehog proteins, and which is not identical to the DNAs of said mouse, chicken, human and zebrafish sonic hedgehog proteins.